| <br> | Claims |  |
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| App | licati | on/C | ontrol | No. |
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10/806,341

SHIN, HONG-JAE

Applicant(s)/Patent under Reexamination

Examiner

Art Unit

Jasmine J. Clark

2815

| <b>√</b> | Rejected |
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| =        | Allowed  |

(Through numeral)
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Appeal Α

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Interference

0 Objected

|                  |  |          |          |  |              |                |          | ٠            |              |          |
|------------------|--|----------|----------|--|--------------|----------------|----------|--------------|--------------|----------|
| Cla              | im                                     | Date     |          |  |              |                |          |              |              |          |
| Final            | Original                               | 10/4/05  |          |  |              |                |          |              |              |          |
| 1                | 1                                      | Ī        |          |  |              |                |          |              |              |          |
| 2                | 2                                      | ▐▔       |          | _  |              | $\vdash$       |          |              | $\neg$       |          |
| 2<br>3<br>6<br>7 | 3                                      | =        |          |  |              |                |          | $\neg$       |              |          |
| 6                | 4                                      | =        | _        |  |              |                |          | $\neg$       |              | $\neg$   |
| 7                | 5                                      | =        |          |  | _            |                |          |              |              |          |
|                  | 6                                      | Ι-       |          |  | ┢            | $\vdash$       |          |              |              |          |
|                  | 7                                      | ·        |          |  | Г            |                |          |              |              |          |
|                  | 1<br>2<br>3<br>4<br>5<br>6<br>7        | -        |          |  |              |                |          |              |              |          |
|                  | 9                                      | Ι-       |          |  |              | _              |          |              |              |          |
| 4                | 10                                     | =        |          |  |              |                |          |              |              |          |
| 5                | 11                                     | =        |          |  |              |                |          |              |              |          |
|                  | 12                                     |          |          |  | Г            | Г              |          |              |              |          |
|                  | 10<br>11<br>12<br>13<br>14<br>15<br>16 |          |          |  |              |                |          |              |              |          |
|                  | 14                                     |          |          |  |              |                |          |              |              |          |
|                  | 15                                     |          |          | Г  |              |                |          |              |              |          |
|                  | 16                                     |          |          |  |              |                |          |              |              |          |
|                  | 17                                     |          |          |  |              |                |          |              |              |          |
|                  | 18                                     |          |          |  |              |                |          |              |              |          |
|                  | 18<br>19                               |          |          |  |              |                |          |              |              |          |
|                  | 20                                     |          |          |  |              |                |          |              |              |          |
|                  | 21                                     |          |          |  |              |                |          |              |              |          |
|                  | 21<br>22<br>23<br>24<br>25             |          |          |  |              |                |          |              |              |          |
|                  | 23                                     |          |          |  |              |                |          |              |              |          |
|                  | 24                                     |          |          |  |              |                |          |              |              |          |
|                  | 25                                     | L        |          | L  | L            |                |          |              |              |          |
|                  | 26<br>27<br>28<br>29<br>30<br>31       |          |          | $ldsymbol{ld}}}}}}$ | L            | L              |          |              |              |          |
|                  | 27                                     |          |          |  |              |                |          | <u></u>      |              | Щ        |
|                  | 28                                     | L        | _        |  | <u> </u>     | <u> </u>       |          | <u> </u>     | Ш            |          |
|                  | 29                                     | _        | <u></u>  | 匚  | <u> </u>     | <u> </u>       |          | L_           | _            | Щ        |
|                  | 30                                     | 1        | <u></u>  | _  | L            | <u> </u>       |          |              | _            | Щ        |
| ļ                | 31                                     | 1_       |          |  | L            |                |          | <u> </u>     | L_           | Ш        |
|                  | 32<br>33                               | _        | L.       | _  | $oxed{oxed}$ | <u> </u>       | _        | <u> </u>     | _            | Ш        |
|                  | 33                                     | 1        |          | _  | ┖            | <u> </u>       | <u> </u> | L_           | _            | Ш        |
|                  | 34<br>35                               | ↓        | <u> </u> | <u> </u>   | ╙            | <u> </u>       | _        | _            | <u> </u>     | Н        |
|                  | 35                                     | ┞        | _        | <u> </u>   | <u> </u>     | ├              | _        | _            |              | Н        |
|                  | 36                                     | $\vdash$ | <u> </u> | <u> </u>   | 上            | <del> </del> — | _        |              | <u> </u>     | Ш        |
| <u> </u>         | 37                                     | $\vdash$ | <u> </u> | _  | ┡            | ┞-             | _        | _            | _            | Н        |
| <u> </u>         | 38                                     | $\vdash$ | <u> </u> | ₩  | ╄-           | -              | 1        | -            | -            | $\vdash$ |
| <u> </u>         | 39                                     | $\vdash$ | -        | $\vdash$   | -            | ├              | ₩        | -            | $\vdash$     | Н        |
| -                | 40                                     | $\vdash$ | ├-       | $\vdash$   | ⊢            | ┼              | $\vdash$ | -            | <del> </del> | Н        |
|                  | 41                                     | -        | ╀        | -  | $\vdash$     | +-             | $\vdash$ | <del> </del> | 1            | $\vdash$ |
| <del> </del>     | 42                                     | -        | ├-       | $\vdash$   | $\vdash$     | +-             | $\vdash$ | $\vdash$     | -            | $\vdash$ |
|                  | 44                                     | +-       | ╁        | ⊢  | ├            | 1-             | $\vdash$ | -            | ├-           | $\vdash$ |
|                  | 45                                     | +-       | $\vdash$ | $\vdash$   | +-           | +              | $\vdash$ | -            | $\vdash$     | $\vdash$ |
| <u> </u>         | 46                                     | +-       | -        | $\vdash$   | +-           | ╁              | $\vdash$ | -            | -            | $\vdash$ |
|                  | 47                                     | +        | $\vdash$ | +  | +-           | $\vdash$       | $\vdash$ | -            | $\vdash$     | $\vdash$ |
| -                | 47                                     | +-       |          | ├  | +            | +              | $\vdash$ | 1            | -            | $\vdash$ |
| <b>-</b>         | 48                                     | ╁        | $\vdash$ | ╁  | +-           | +              | ┼        | $\vdash$     | $\vdash$     | -        |
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|                  | 50                                     |          | 1        | 1  | 1_           | <u>L_</u>      |          | Ц_           | l            | Ь_       |

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|-----------|----------|----------|--|--|----------|----------|--|----------|--|------------------|
|           |          |          |  |  |          |          | T  |          |  |                  |
| Final     | Original |          |  |  |          |          |  |          |  |                  |
|           | 51       |          |  |  |          |          |  |          |  |                  |
|           | 52       |          |  |  |          |          | i į  | 1        |  |                  |
|           | 52<br>53 |          |  |  |          |          |  |          |  |                  |
|           | 54       | $\neg$   |  | _  |          |          |  |          |  |                  |
| 1         | 55       | _        |  | $\dashv$   | _        |          |  |          |  |                  |
| $\vdash$  | 56       | -        |  | $\dashv$   | -        |          | $\dashv$   |          | $\vdash$   |                  |
| $\vdash$  | 57       |          | -1   | $\dashv$   | _        | -        | -  | _        | $\dashv$   |                  |
|           | 58       | $\dashv$ | $\dashv$   | $\dashv$   | -        |          | $\vdash$   |          | _  |                  |
| -         | 59       | $\dashv$ | -  |  | _        | $\vdash$ | $\dashv$   | _        | =  |                  |
| <b> </b>  | 59       | $\dashv$ | -  | -  |          |          | _  | _        | =  |                  |
|           | 60       | $\dashv$ | _  |  |          | _        | -  |          | $\vdash$   | -                |
|           | 61       | $\dashv$ |  |  |          | _        | -  |          |  | _                |
|           | 62       | $\dashv$ |  |  | _        | _        | _  |          | $\vdash$   |                  |
|           | 63       |          |  |  |          |          | $\vdash$   | _        |  | $\vdash$         |
|           | 64       | 4        |  | $\square$  |          |          | $\vdash$   |          | -  | <u> </u>         |
|           | 65       | -        |  | -  | _        | -        | Н  |          | <u> </u>   | <u> </u>         |
| $\vdash$  | 66       |          |  | _  |          |          |  |          | $\vdash$   | _                |
|           | 67       |          |  |  |          |          |  |          | _  |                  |
|           | 68       | _        |  |  |          |          |  |          |  |                  |
|           | 69       |          |  |  |          |          |  |          |  | _                |
|           | 70       |          |  |  |          |          |  |          | <u> </u>   |                  |
|           | 71<br>72 | _        |  |  |          | <u> </u> | <u> </u>   |          | _  |                  |
|           | 72       |          |  |  |          | _        | <u> </u>   | _        | _  | <u> </u>         |
|           | 73       |          |  |  | _        | <u> </u> | <u> </u>   |          | _  | <u> </u>         |
| $\square$ | 74       |          | _  |  |          | <u> </u> | _  | _        | _  | _                |
|           | 75       |          |  | _  |          | <u> </u> | _  |          | _  | <u> </u>         |
| -         | 76       |          |  |  |          | -        | -  |          | <u> </u>   | -                |
|           | 77       | _        |  |  |          |          | _  | _        | <u> </u>   | ┝                |
| $\vdash$  | 78       |          |  | _  |          | _        |  | ļ        | ┝  | ├─               |
| $\vdash$  | 79       |          |  | H  | _        |          | -  | -        | -  | ⊢                |
| $\vdash$  | 80       |          |  |  | _        | -        | $\vdash$   | -        | -  | ┝                |
| $\vdash$  | 81       | _        |  | -  |          | -        | -  | ⊢        | ├  | -                |
| $\vdash$  | 82<br>83 |          |  | H  |          | -        | $\vdash$   | -        | -  | $\vdash$         |
|           | 03       | _        |  | $\vdash$   | -        | -        | $\vdash$   |          | -  | ⊢                |
| -         | 84<br>85 |          |  | -  | -        | -        |  | $\vdash$ | -  | -                |
| -         | 86       | -        | -  | -  | -        | ├        | $\vdash$   | $\vdash$ | -  | -                |
| $\vdash$  | 87       |          | -  | H  | ⊢        | -        | $\vdash$   | $\vdash$ | $\vdash$   | -                |
| $\vdash$  | 88       |          | <u> </u>   | <del>-</del>                                     | $\vdash$ | -        | 1  | $\vdash$ | $\vdash$   | -                |
| $\vdash$  | 89       |          |  | $\vdash$   | -        | -        | <del> </del>                                     | $\vdash$ | <del>                                     </del> | <del>  -  </del> |
| $\vdash$  | 90       | -        | -  | $\vdash$   | H        | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$         |
| $\vdash$  | 91       |          | -  | $\vdash$   | $\vdash$ | $\vdash$ | <del>                                     </del> | H        |  |                  |
| $\vdash$  | 92       |          | $\vdash$   | $\vdash$   | $\vdash$ |          | 1  |          | <del>                                     </del> | Н                |
| -         | 93       | -        | Н  | T  | $\vdash$ | T        | <del>                                     </del> | Т        | t  | T                |
|           | 94       |          | Н  | 1  | $\vdash$ |          | <del>                                     </del> | T        | 1  | T                |
|           | 95       |          | <del>                                     </del> | $\vdash$   |          | T        | $\vdash$   | 1        |  | <b> </b>         |
|           | 96       | -        |  | <del>                                     </del> | _        | 1        | Т  | Г        | <u> </u>   | Г                |
|           | 97       | $\vdash$ | Г  | T  | -        | T        | 1  | Г        |  | 1                |
|           | 98       |          | _  |  | Т        | Π        | Г  |          | 1  | Ī                |
|           | 99       |          |  | Π  | Γ        | Г        | Π  | Γ        |  |                  |
|           | 100      |          |  |  |          |          |  | П        |  |                  |

| Cla  | aim                             | Date     |          |          |  |  |              |  |              |                 |
|--|---------------------------------|----------|----------|----------|--|--|--------------|--|--------------|-----------------|
|  |                                 |          |          |          | Ī  |  |              |  |              |                 |
| <del>-</del>                                     | Original                        |          |          |          |  |  |              |  |              |                 |
| Final  | rigi                            |          |          |          |  |  |              |  |              |                 |
| -  | 0                               |          |          |          |  |  |              |  |              | - 1             |
|  | 101                             | $\dashv$ | -        | $\vdash$ |  | Н  | -            | -  |              | ᅥ               |
|  | 101<br>102                      | -        | $\dashv$ | $\dashv$ | _  | $\dashv$   | _            |  |              | $\dashv$        |
|  | 103                             |          |          |          | _  |  |              |  |              | $\dashv$        |
|  | 103                             | Н        | _        |          | _  |  |              |  |              | $\dashv$        |
|  | 104<br>105                      | -        |          |          |  | Н  |              |  | $\dashv$     | $\dashv$        |
|  | 106                             | -        |          | Н        |  | $\vdash$   |              |  | $\vdash$     | $\dashv$        |
|  | 107                             |          | _        | _        |  | -  |              |  | $\vdash$     | $\dashv$        |
|  | 108                             | _        | _        | _        |  |  |              |  | _            | $\dashv$        |
|  | 108                             | _        |          | _        | _  | Н  |              |  | Н            | $\dashv$        |
|  | 110                             |          |          | -        | _  | -  |              | _  | _            | $\dashv$        |
|  | 110                             | -        |          | -        |  | ┝  |              | H  | -            |                 |
|  | 111                             | -        |          | $\vdash$ | -  | -  | <u> </u>     |  | $\vdash$     |                 |
|  | 112                             | -        |          | $\vdash$ | <u> </u>   | -  | <u> </u>     | <u> </u>   | $\vdash$     | $\vdash$        |
|  | 113                             | -        | <u> </u> |          |  | -  | <u> </u>     | ├  | -            | $\vdash \vdash$ |
|  | 114                             | -        | $\vdash$ | -        |  | $\vdash$   | <u> </u>     | -  | $\vdash$     | $\dashv$        |
|  | 112<br>113<br>114<br>115<br>116 | -        | <u> </u> |          | -  |  | <u> </u>     | -  |              | Н               |
|  | 117                             | ⊢        | Ь.       | -        | $\vdash$   | $\vdash$   | -            |  | $\vdash$     | ${ m H}$        |
|  | 117<br>118                      | $\vdash$ | -        | ├        | $\vdash$   | $\vdash$   | -            | -  | $\vdash$     | Н               |
|  | 119                             | $\vdash$ | -        |          | $\vdash$   | $\vdash$   | -            |  | ┢            |                 |
|  | 120                             | -        | ⊢        | -        |  | $\vdash$   |              | -  |              | Н               |
|  | 120<br>121                      | -        | ┝        | ├        | $\vdash$   |  | $\vdash$     | -  | -            | Н               |
| _  | 122                             | ├        | ├        | ├        | -  | H  | _            |  | -            | Н               |
|  | 122                             | $\vdash$ |          | -        | ┝  | <del> </del>                                     | <del> </del> | ┢  | ┢            |                 |
| _  | 124                             | ┢        | -        | -        |  | -  | -            | ┢  | ┢            |                 |
|  | 123<br>124<br>125               | $\vdash$ | ┝        | ┢        | H  | $\vdash$   | -            | -  | $\vdash$     | H               |
|  | 126                             | -        | ├─       | ┢        | $\vdash$   | ┢  | $\vdash$     | $\vdash$   | <del> </del> | Н               |
| -  | 126<br>127<br>128<br>129<br>130 |          | ┢        | -        | $\vdash$   | _  | -            | $\vdash$   | 一            | Н               |
| -  | 128                             |          | -        | -        |  | $\vdash$   | -            | <del>                                     </del> | $\vdash$     | Н               |
|  | 129                             | $\vdash$ | ┢╌       | _        | $\vdash$   | $\vdash$   | -            | _  | 1            | $\vdash$        |
|  | 130                             |          | $\vdash$ | _        | $\vdash$   |  | <u> </u>     | 1  |              | Н               |
|  | 131                             | ┢        |          | -        | H  |  |              | <del>                                     </del> | -            | Н               |
|  | 131<br>132                      |          | -        | ┢        | <del>                                     </del> | $\vdash$   |              |  |              |                 |
|  | 133                             | ├        | ┢╌       | Н        | -  | ╁  | 1            |  | 一            | $\vdash$        |
| <del></del>                                      | 134                             | 1        | $\vdash$ | Н        | $\vdash$   | <u> </u>   | $\vdash$     |  | $\vdash$     | Н               |
| <b></b>  | 134<br>135                      | Н        | $\vdash$ | <u> </u> | $\vdash$   | T  | Н            |  | T            | Н               |
| <del>                                     </del> | 136                             | $\vdash$ | $\vdash$ | 1        |  | $\vdash$   | 1            | 1  | t            | П               |
| <b></b> -  | 137                             | T        |          | T        | $\vdash$   | <del>                                     </del> | $\vdash$     | T  | T            | П               |
| _  | 137<br>138                      | T        | Т        | T        | 1  |  |              | 1  | 1            | П               |
| <del></del>                                      | 139                             | $\vdash$ |          |          | Т  | Τ  | <u> </u>     |  | $\top$       | П               |
| T  | 140                             |          | T        | T        | $\vdash$   | Π  |              |  |              | П               |
|  | 141                             |          | Г        |          | Г  |  | Π            | T  | Π            | П               |
|  | 142                             |          |          | Г        | Г  | Г  |              |  |              | П               |
|  | 143                             |          | Г        |          | Γ  | Т  |              |  |              | Γ               |
|  | 144                             | Г        |          |          | Г  | П  |              |  |              | Г               |
|  | 145                             |          | Π        | Π        | Π  |  |              |  |              |                 |
|  | 146                             | 1        | Т        | Г        | Г  | 1  |              | П  | T            |                 |
|  | 147                             | Г        | Г        | Π        | Γ  | T  | Π            |  | L            |                 |
|  | 148                             | T.       | Γ        |          | Ī  |  | Γ            | Π  | L            |                 |
|  | 149                             | l        |          |          | Π  |  |              |  |              |                 |
|  | 150                             |          |          | Π        | Π  |  |              |  | I            |                 |
|  | <u> </u>                        |          |          |          | _  |  | _            | _  |              |                 |